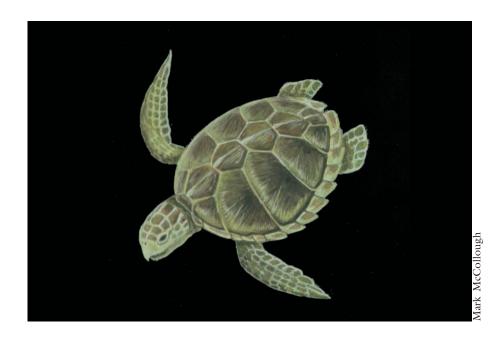
FEDERALLY ENDANGERED

Atlantic Ridley

(Lepidochelys kempii)

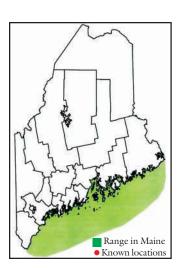


Description

The Atlantic or Kemp's ridley turtle is a small marine turtle about 20-28 inches in length. The adult has an almost circular or slightly heart-shaped grayish-green carapace (top shell) that is typically wider than long, and serrated along the rear margin. The plastron (bottom shell) is white, and the head and limbs are gray. The beak is parrot-like and the paddle-like limbs are used for swimming. The male has a long tail, a thick, curved claw on each fore-limb, and a concave plastron. The female has a short tail that barely extends past the edge of the carapace and lacks recurved claws on the forelimbs.

Range and Habitat

Adult ridleys are primarily restricted to the Gulf of Mexico. Immatures range from the Gulf of Mexico north to Long Island Sound, New England, and Nova Scotia. In late summer and fall, juveniles are frequently seen south of Cape Cod. North of the Cape, Atlantic ridleys often become cold-stunned



and hypothermic, especially in the fall. They are rarely reported in the cold waters of the Gulf of Maine. They frequently feed on the bottom in shallow coastal and estuarine areas (typically less than 150 feet in depth). Juveniles may use mats of *Sargassum* or sea-grass for hiding and foraging.

Life History and Ecology

Atlantic ridleys may attain sexual maturity at 7-15 years. Most nesting occurs along beaches of the Gulf of Mexico from April to July. Courtship and mating occur offshore in close proximity to nesting beaches. Most females return annually or every other year to nest. Females nest in groups, which once numbered in the thousands. One to four clutches are laid each nesting season at 20- to 28day intervals. Females lay successive clutches on beaches within five miles of their previous nest. Nests are excavated in fine sand, either on the beach or on the dunes up to 180 feet from water. Clutch size varies from 100 to 110 eggs. Females bury the eggs and leave them to incubate on their own for 45-60 days. Following nesting, adults migrate to their principal feeding areas in the Gulf of Mexico, where they remain until the following nesting cycle. Juveniles travel as far north as the marine waters off the New England coast. Prey items include crabs, shrimp, sea urchins, snails, bivalves, squid, jellyfish, fish, marine plants, and algae.

Threats

Sea turtles face many natural obstacles to their survival. Predators such as raccoons, ants, and crabs consume eggs in the nest. Hatchlings are eaten by fish, seabirds, and a host of other marine predators. Like other turtle populations, high loss of young is balanced by the longevity of adults, which can reach at least 20 years in captivity, but probably much longer in the wild. Any additional sources of mortality can cause population declines. The decline of the Atlantic ridley is attributed to heavy harvest of eggs, killing adults for meat and other products, and high level of accidental capture by shrimp trawlers.

Degradation of beach habitat, dredging and channelization projects, boat collisions, oil spills, and entanglement in and ingestion of marine debris also cause mortality.

Conservation and Management

The Atlantic ridley is one of the most endangered sea turtles. Populations have declined since the 1940s when tens of thousands could be observed nesting in a single day. Today fewer than 1,500 to 3,000 individuals nest annually. The species was federally listed as endangered in 1970. Protection of individuals and nests and the use of turtle excluder devices in shrimp trawls have contributed to slight population increases. Recovery programs include captive-rearing of juveniles and establishment of an introduced nesting colony at Padre Island, Texas. Increasing human encroachment and access to marine areas in Mexico is a major concern.

Given the rarity of this turtle in Maine, little can be done in Maine to contribute effectively to its recovery. Entanglement in fishing gear and nets may take some sea turtles in the Gulf of Maine each year. From 1986-1997, the Atlantic ridley sea turtle was state-listed as endangered in Maine because of its federal listing status. However, in 1996, the Maine Legislature chose to terminate automatic state listing of federally listed species. As a result, this species was removed from the Maine Endangered Species List in 1997.

Recommendations:

The Maine Department of Marine Resources has lead management authority for marine turtles, including the Atlantic ridley, and makes the following recommendations.

- ✓ Atlantic ridleys are very rarely encountered in the Gulf of Maine; however, specially designed gear and frequent tending of traps and nets may help to prevent deaths from entanglement.
- ✓ Maine should enforce national and international laws to minimize the dumping of pollutants and solid waste into the ocean and nearshore waters. Prohibit overboard discharge of waste in Gulf of Maine waters.
- ✓ Avoid use of balloons, especially in coastal areas. The National Wildlife Federation, Center for Marine Conservation, and other marine conservation groups discourage the use of helium-inflated balloons because they may drift into marine waters and become a hazard to wildlife when ingested. More information on the hazards of plastics in the marine environment to marine turtles and whales can be found at www.pacificwhale.org/childrens/fsdebris.html.

- ✓ Include in Gulf of Maine marine oil spill contingency plans strategies for rehabilitating oiled marine turtles, especially in late summer.
- ✓ Develop protocols for rescuing and resuscitating cold-stunned sea turtles.
- ✓ To reduce adult mortality, encourage use of turtle excluder devices (TEDs) and gill net regulations in Southeast and Gulf of Mexico fisheries.